

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A flexible semiconductor device comprising:

[[-]] a semiconductor ~~substrate, which laterally extends~~
substrate formed in an active area;

[[-]] an integrated circuit provided with a plurality of semiconductor elements, that are defined at a surface of the semiconductor substrate, ~~that is present in the semiconductor~~
substrate having a suitable thickness so as to be flexible, and
~~which wherein the plurality of semiconductor elements are~~
interconnected according to a desired pattern in an interconnect structure,

[[-]] a support layer of electrically insulating material,
and

[[-]] an antenna, which is ~~defined~~ located laterally outside the active area ~~in an electrically conductive layer adjacent to the support layer~~ and is electrically connected to the interconnect structure, the antenna and the integrated circuit being supported by the support layer, and the semiconductor substrate being substantially confined to an area of the integrated circuit and being absent in a non-substrate area around the antenna and between the antenna and the integrated circuit,

~~characterized in that at least one conductor from the interconnect structure extends laterally to the antenna so as to constitute the electrical interconnection.~~

2. (Currently Amended) A The flexible semiconductor device as claimed in Claim 1, wherein the integrated circuit is devoid of any bond pad structures.

Claim 3 (Canceled)

4. (Currently Amended) A The flexible semiconductor device as claimed in claim 1, ~~characterized in that~~ wherein the active area

of the substrate is in ~~the~~ a shape of a mesa.

5. (Currently Amended) A The flexible semiconductor device as claimed in claim 1 ~~characterized in that wherein~~ the semiconductor substrate is present only in the active area.

6. (Currently Amended) A The flexible semiconductor device as claimed in claim 1, ~~characterized in that wherein~~ the antenna is an inductor suitable for wireless communication.

7. (Currently Amended) A The flexible semiconductor device as claimed in claim 6, wherein the integrated circuit is ~~laterally located within~~ substantially surrounded by the inductor.

8. (Currently Amended) A The flexible semiconductor device as claimed in claim 7, wherein the integrated circuit is subdivided into a plurality of circuit blocks, which are mutually spaced apart, ~~but and~~ interconnected through the interconnect structure.

9. (Currently Amended) A The flexible semiconductor device as

claimed in claim 8, ~~wherein the device comprises active areas corresponding to the plurality of circuit blocks are formed in the active area, and a non-substrate area is defined laterally between the active areas and around these areas, the semiconductor substrate being absent in said non-substrate area.~~

10. (Currently Amended) ~~A~~ The flexible semiconductor device as claimed in claim 6, ~~characterized in that wherein~~ a perpendicular projection of the integrated circuit onto ~~the electrically conductive layer of the antenna~~ at least substantially overlaps with the antenna.

Claims 11-20 (Canceled)

21. (New) The flexible semiconductor device of claim 1, wherein the antenna and the integrated circuit are on opposite sides of the interconnect structure.